



Amesbury Elementary School

School Building Committee

October 25, 2018



 **DINISCO DESIGN**
architects + planners

Agenda

- MSBA update
- Site selection history
- AES site update
- CES site update
- FAQs
- Survey Results
- Site evaluation and selection
- MSBA Process & Timeline

MSBA Update

- MSBA original K-5 total enrollment: 850
- MSBA new K-5 total enrollment: 875
 - District-wide K-2 enrollment: 425 students
 - District-wide 3-5 enrollment: 450 students

School Capacity | AES

Year	Integrated PK	K	1	2	3	4	5	6	7	8	Total
2026-27 MSBA Enrollment		141	142	142	150	150	150				875
2018-19 actual (9/20/18)		120	148	141	169	179	165				922
AES PK-2											
Total # students AES		141	142	142							425
Average # students/classroom		18	20	20							
# classrooms required	3.00	7.83	7.10	7.10							
Round # Classrooms	3	8	7	7							25
Total Capacity		144	140	140							424
Current enrollment		120	148	141							409
Student Difference											15
Capacity is 15 students above current enrollment											

Total # students AES		141	142	142							425
High # students/classroom		20	22	22							
# classrooms required	3.00	7.05	6.45	6.45							
Round # Classrooms	3	8	7	7							25
Total Capacity		160	154	154							468
Current enrollment		120	148	141							409
Student Difference											59
Capacity is 59 students above current enrollment											

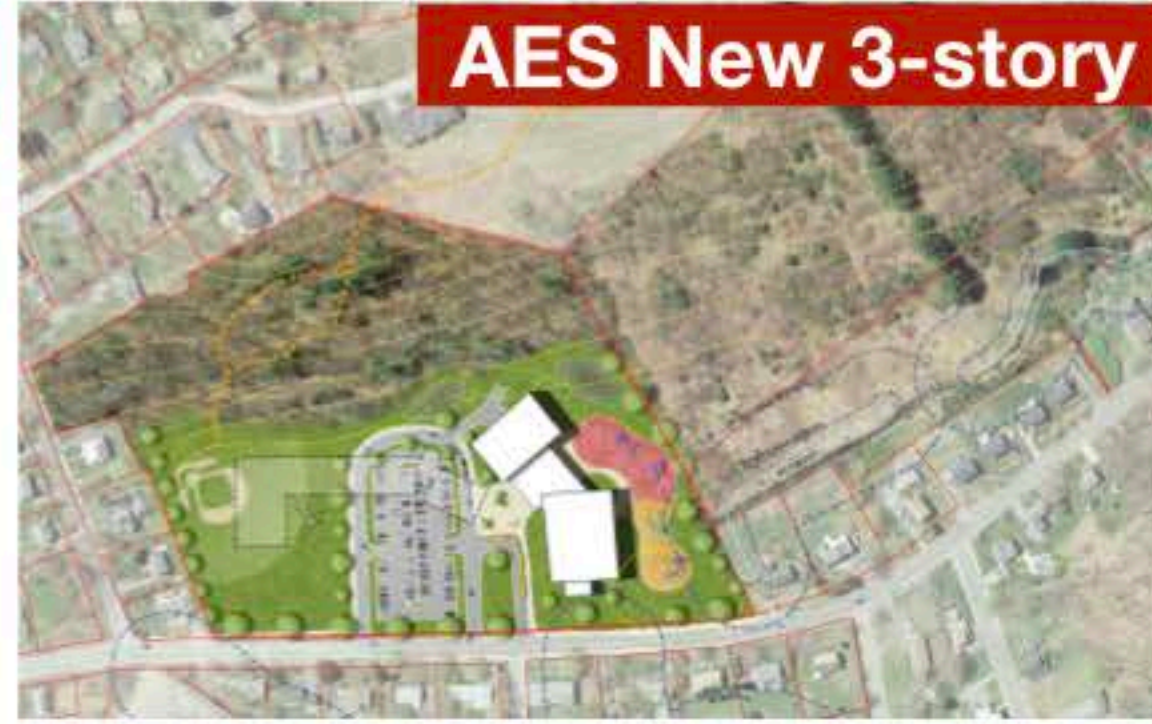
School Capacity | CES

Year	Integrated PK	K	1	2	3	4	5	6	7	8	Total
2026-27 MSBA Enrollment		141	142	142	150	150	150				875
2018-19 actual (9/20/18)		120	148	141	169	179	165				922
CES 3-5											
Total # students CES					150	150	150				450
Average # students/classroom					22	22	22				
# existing classrooms					6.82	6.82	6.82				20
Round # Classrooms					7	7	7				21
Total Capacity					154	154	154				462
Current enrollment					169	179	165				513
Keep other program space as Gen Ed.					1	1	1				
Total Classrooms					8	8	8				24
Total Capacity					176	176	176				528
Current enrollment					169	179	165				513
Student Difference											15
Capacity is 15 students above current enrollment											

Capacity by Class Size Range											
Total # students CES					150	150	150				450
High # students/classroom					24	24	24				
# existing classrooms					6.25	6.25	6.25				19
Round # Classrooms					7	7	7				21
Keep other program space as SPED					0	0	0				
Total Classrooms					7	7	7				21
Total Capacity					168	168	168				504
Current enrollment					169	179	165				513
Student Difference											-9
Capacity is -9 students under current enrollment over 21 classrooms											

Project History | Site

March
2018



May
2018



June
2018



Project History | Site

June
2018



AES Reno/Add



AES New 3-story



CES New 3-story



Private Sites

July
2018



AES Reno/Add



AES New 3-story



CES New 3-story

October
2018



AES Reno/Add



AES Phased New



CES New 3-story

AES Site | Concept 1 — Renovation/Addition

~465 students
100,000 SF



Pros

- Same neighborhood
- Possibly retain playfield

Cons

- 40 month construction
- Construction on occupied site
- Minimal on-site parking during construction
- Minimal construction lay-down area
- Limited parking when complete
- Significant retaining walls for play areas
- Storm water management

AES | Concept 1 — First Floor Plan



AES | Concept 1 — Second Floor Plan



AES | Concept 1 — Third Floor Plan



AES Site | Concept 1 — Renovation/Addition



AES Site | Concept 1 — Existing Street View



AES Site | Concept 1 — New Street View



AES Site | Concept 2—New Construction

~465 students
100,000 SF



Pros

- Same neighborhood
- All new building
- Possibly retain playfield

Cons

- 40 month construction
- Construction on occupied site
- Minimal on-site parking during construction
- Minimal construction lay-down area
- Limited parking when complete
- Significant retaining walls for play areas
- Storm water management

AES | Concept 2 — First Floor Plan

The first floor plan for AES Concept 2 is a detailed architectural drawing of a school building. The building is rectangular with a central corridor and various rooms. The rooms are color-coded: blue for stage and storage, orange for cafeteria and kitchen, purple for music, green for classrooms and administration, and yellow for other rooms. The plan includes a parking lot with 20 cars, a playground with a red area and a blue area, and a compass rose showing the orientation of the building. A scale bar indicates a distance of 50 feet. A red arrow points to the 'Entry' on the right side of the building.

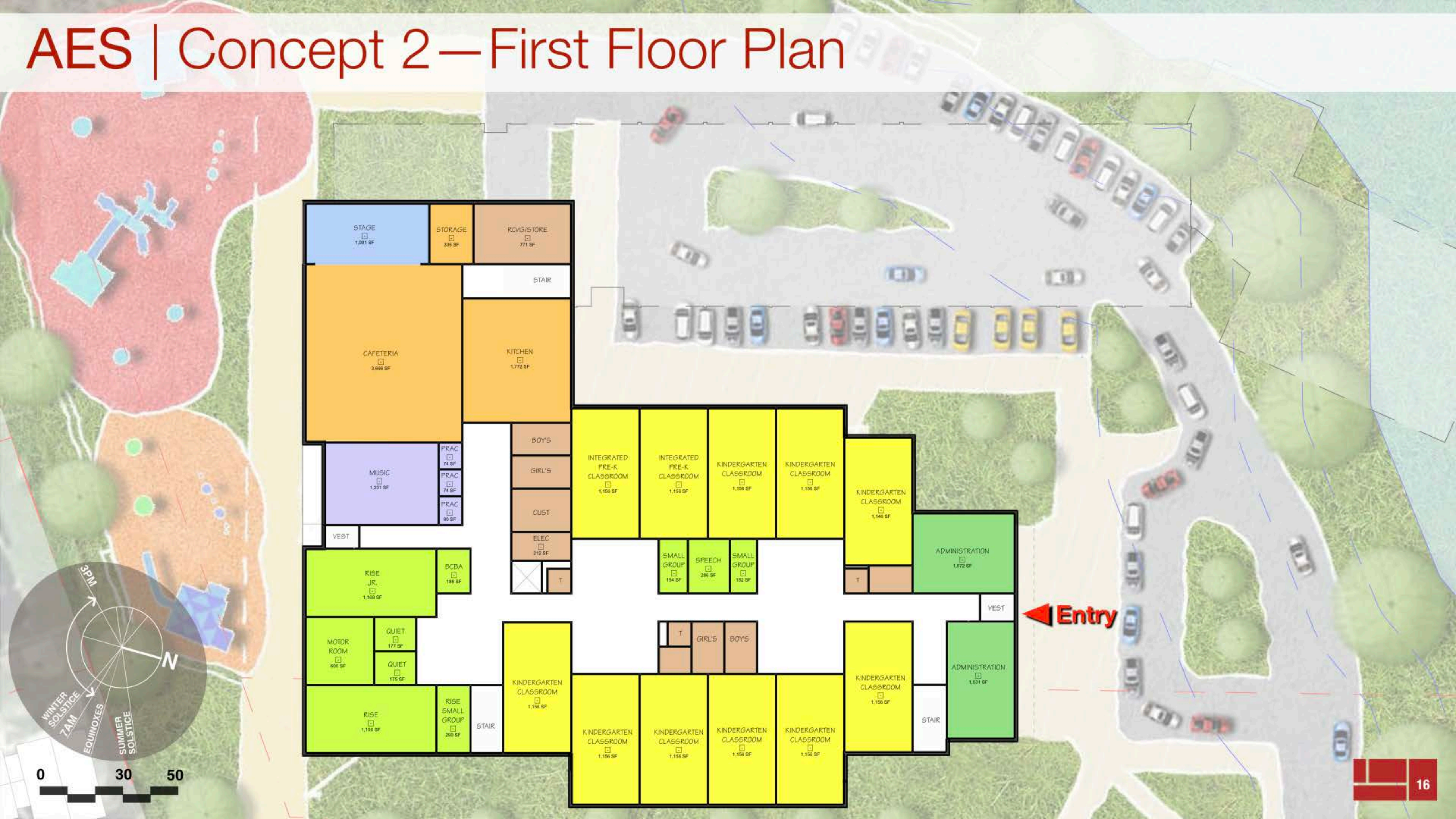
Room List:

- STAGE: 1,001 SF
- STORAGE: 335 SF
- ROVGS/STORE: 771 SF
- CAFETERIA: 3,666 SF
- KITCHEN: 1,772 SF
- MUSIC: 1,231 SF
- PRAC: 74 SF (3)
- VEST: 1
- BOYS: 1
- GIRL'S: 1
- CUST: 1
- ELEC: 212 SF
- T: 1
- RISE JR.: 1,198 SF
- BCBA: 185 SF
- MOTOR ROOM: 600 SF
- QUIET: 172 SF
- QUIET: 175 SF
- RISE: 1,198 SF
- RISE SMALL GROUP: 290 SF
- STAIR: 1
- KINDERGARTEN CLASSROOM: 1,156 SF (8)
- INTEGRATED PRE-K CLASSROOM: 1,156 SF (2)
- SMALL GROUP: 194 SF (2)
- SPEECH: 266 SF
- ADMINISTRATION: 1,072 SF
- ADMINISTRATION: 1,031 SF
- STAIR: 1

Scale: 0, 30, 50 feet

Compass Rose: 3PM, N, 7AM, EQUINOXES, WINTER SOLSTICE, SUMMER SOLSTICE

Entry: Indicated by a red arrow on the right side of the building.



AES | Concept 2—Second Floor Plan



AES | Concept 2—Third Floor Plan



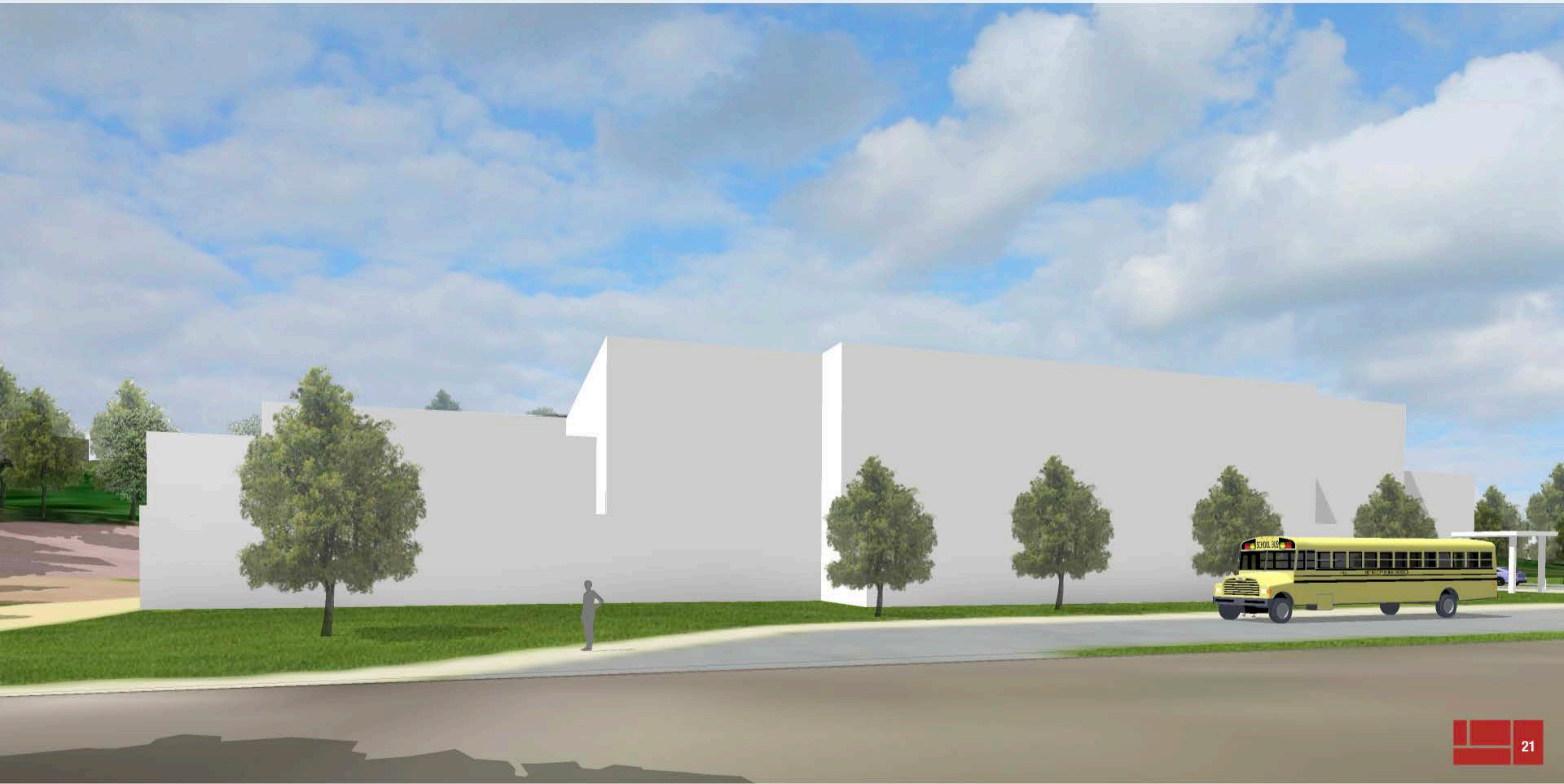
AES Site | Concept 2—New Construction



AES Site | Concept 2—Existing Street View



AES Site | Concept 2—New Street View



AES Site | Concept 1 & 2—Traffic Plan



Pros

- Separate bus and car Queues

Cons

- Queueing through parking lot
- Additional neighborhood traffic during drop-off and pick-up
- Minimal on-site parking

AES Site | Concept 1 & 2—Additional Parking Option



Pros

- Additional parking for parents and staff
- Near school site

Cons

- Additional project cost lease or purchase land
- Requires crossing the street

CES Site | Concept 3—New Construction



CES Site | Concept 3—New Construction

465 students (+ PK)
~100,000 SF

Pros

- New building
- Campus creation
- Consolidated busing
- Improved on-site traffic
- Amesbury school site available for other use

Cons

- Construction on occupied site
- Wetlands
- Neighborhood traffic congestion
- Replication of city fields
- Reduced green space



CES | Concept 3—Ground Floor



CES | Concept 3—First Floor



CES | Concept 3—Second Floor



CES | Concept 3—New Building



CES Site | Concept 3—Preferred Traffic Plan A



Pros

- Approved by APD & AFD
- Separate queues for CES and AES
- Consolidated busing
- One way traffic during drop-off and pick-up
- Additional driveway reduces vehicular conflicts

Cons

- Requires second exit driveway
- Additional neighborhood traffic @ drop-off & pick-up

CES Site | Concept 3—Traffic Plan A Impacts

- Additional cross town traffic ~ 200 vehicles during drop-off & pick-up (critical intersections under review)
- Lions Mouth Road increase ~ 200 vehicles during drop-off & pick-up
- Lions Mouth Road increase ~ 100 vehicles during teacher arrival & departure
- Lions Mouth Road is able to accommodate increased traffic
- Second driveway improves traffic flow and efficient egress
- Increased on-site queuing reduces impact to Lions Mouth Road
- Additional crossing guards will be required

Woodsom Site | Existing



Woodsom Site | New Field Layout—Concept A



Pros

- Improves existing fields
- Connects parking for weekend recreation

Cons

- Revises the landscape of Woodsom Farm

Woodsom Site | New Field Layout—Concept B



Pros

- Improves existing fields
- Connects parking for weekend recreation

Cons

- Revises the landscape of Woodsom Farm

Project Costs

OPTION 5 All PK-2	# of Students	Program Area ⁽¹⁾	Gross Square Footage	Estimated Construction Cost	Site Premiums	Project Cost	City Share	Woodson Fields	Construction Duration
AES Site Reno/Add	425 Students Plus PK students	67,000 NFA	100,000 GSF	\$44,480,000 D-B-B	\$ 3,012,888	\$59,366,110	\$36,824,821	\$ -	40 months
				\$48,300,000 CM	\$ 3,012,888	\$64,141,110	\$39,689,821	\$ -	40 months
AES Site Phased New	425 Students Plus PK students	67,000 NFA	100,000 GSF	\$47,000,000 D-B-B	\$ 3,264,000	\$62,830,000	\$39,003,600	\$ -	40 months
				\$51,000,000 CM	\$ 3,264,000	\$67,830,000	\$42,003,600	\$ -	40 months
CES Site New	425 Students Plus PK students	67,000 NFA	100,000 GSF	\$47,000,000 D-B-B	\$ 320,000	\$59,150,000	\$35,618,000	\$ 2,030,000	24 months
				\$51,000,000 CM	\$ 320,000	\$64,150,000	\$38,618,000	\$ 2,030,000	24 months

⁽¹⁾ NFA = Net Floor Area

General Cost Assumptions

- | | | |
|---|---|---|
| 1. Program Area based upon MSBA Space Summary | 4. New D-B-B @ \$435/SF + 8% escalation = \$470/SF | 6. Project Cost = 25% of ECC |
| 2. Gross Square Footage based upon NFA x 1.5 | Reno D-B-B @ \$280/SF + 8% escalation = \$302/SF | 7. City Share @ 40% reimbursement from MSBA |
| 3. Construction Starts Sept. 2020 | 5. New CM ECC @ \$472/SF + 8% escalation = \$510/SF | or 60% share of project excluding fields |
| | Reno CM ECC @ \$306/SF + 8% escalation = \$330/SF | |

AES Reno/Add Site Specific Premiums escalated to 2020:

\$ 378,000 Abatement of existing building @ \$7/SF
 \$ 312,000 Demolition of existng building @ \$8/SF
 \$ 50,000 Dewatering/waterproofing
 \$ 889,600 2% Urban-like construction site premium
 \$ 1,383,288 3% escalation for extended construction duration
 \$ 3,012,888 (Not reimbursable by MSBA)

Average annual homeowner increase*

20 year bond ~ \$470 D-B-B / \$500 CM
 30 year bond ~ \$410 D-B-B / \$440 CM

AES New Site Specific Premiums escalated to 2020:

\$ 378,000 Abatement of existing building @ \$7/SF
 \$ 432,000 Demolition of existng building @ \$8/SF
 \$ 50,000 Dewatering/waterproofing
 \$ 940,000 2% Urban-like construction site premium
 \$ 1,464,000 3% escalation for extended construction duration
 \$ 3,264,000 (Not reimbursable by MSBA)

Average annual homeowner increase*

20 year bond ~ \$495 D-B-B / \$535 CM
 30 year bond ~ \$430 D-B-B / \$465 CM

CES Site Specific Premiums escalated to 2020:

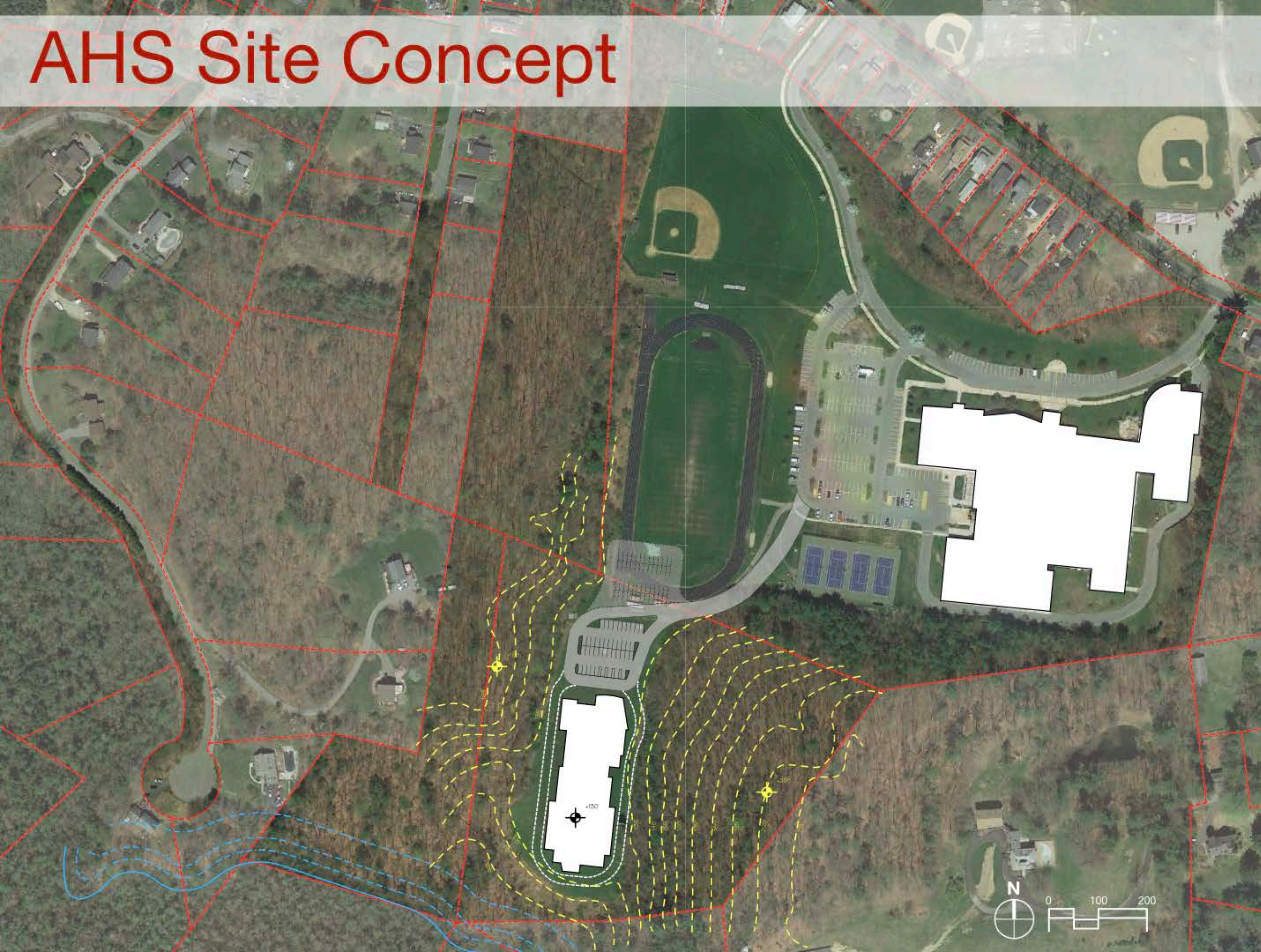
\$ 320,000 Relocate baseball fields
 (Not reimbursable by MSBA)
Woodson Fields est. costs escalated to 2020:
 \$ 1,500,000 Soccer fields
 \$ 530,000 Concession stand
 \$ 2,030,000 (Not reimbursable by MSBA)

Average annual homeowner increase*

20 year bond ~ \$450 D-B-B / \$490 CM
 30 year bond ~ \$395 D-B-B / \$425 CM

*Estimated Tax Impact: 20 year term is based on a 4.5% interest rate projection. The total principal plus interest will be \$57,658,875.00.
 The 30 year term is based on a projection of 5.25%. The total principal plus interest will be \$75,276,900.00.

AHS Site Concept



Pros

- Existing school site

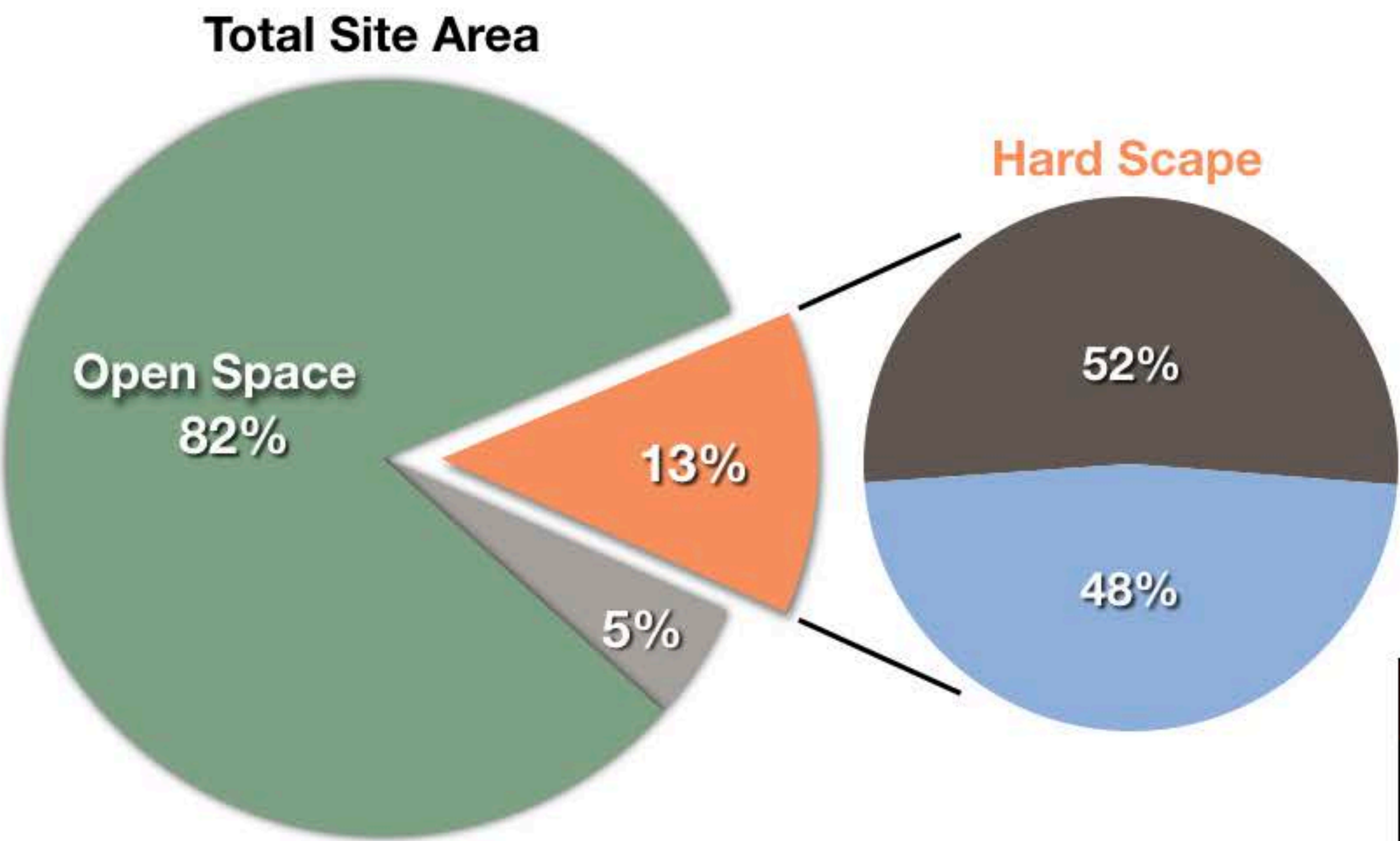
Cons

- Loss of practice fields
- Parking & AES access drives disturb other fields
- Additional neighborhood traffic @ drop-off & pick-up

Open Space Conservancy | AES Site (New)

Open Space Conservancy Requirements

OSC requirements for either the AES or Cashman site will be met.
At least 80% of the overall site maintains the open space designation.



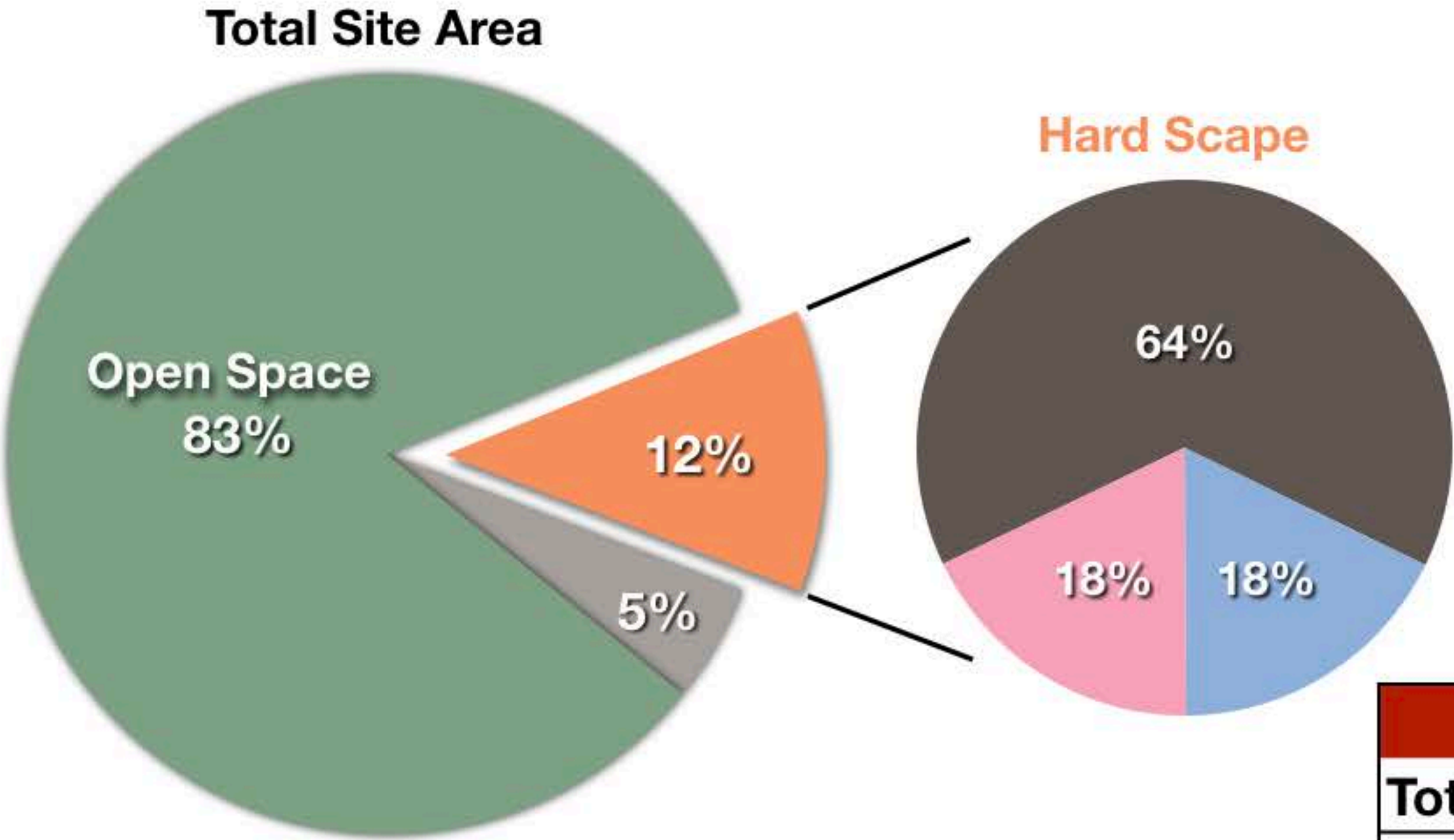
Summary	
Total Site Area	634,800 SF
Total Hard Scape	86,100 SF
Building Footprint	41,000 SF
Parking and Paving	45,100 SF
Sidewalks & Play Areas	35,000 SF
Total Open Space	548,700 SF

Total Site Area	
Site Area	634,800 SF
New Building Footprint	41,000 SF
Building Footprint	41,000 SF
Parking & Paving	45,100 SF
Driveways	40,900 SF
Queues and drop-off area	24,000 SF
Bus Loop	6,000 SF
Emergency Access Drive	9,400 SF
AES Service Drive	1,500 SF
Parking Areas	4,200 SF
AES Lot	4,200 SF
Sidewalks & Play Areas	35,000 SF
New play area	16,500 SF
Sidewalks	18,500 SF

Open Space Conservancy | CES Site

Open Space Conservancy Requirements

OSC requirements for either the AES or Cashman site will be met.
At least 80% of the overall site maintains the open space designation.



Summary	
Total Site Area	1,556,281 SF
Total Hard Scape	237,700 SF
New Bldg. Footprint	42,000 SF
Cashman Footprint	42,700 SF
Parking and Paving	153,000 SF
Sidewalks & Play Areas	95,000 SF
Total Open Space	1,318,581 SF

Total Site Area	
Site Area	1,556,281 SF
New Building Footprint	42,000 SF
Building Footprint	42,000 SF
Cashman Footprint	42,700 SF
Building Footprint	42,700 SF
Parking & Paving	153,000 SF
Driveways	87,400 SF
Queues and Drop-off Areas	73,000 SF
AES Service Drive	14,400 SF
Parking Areas	65,600 SF
AES Lot	40,100 SF
Cashman lot	25,500 SF
Sidewalks & Play Areas	95,000 SF
Existing Cashman Play Area	17,600 SF
New Play Area	35,500 SF
Sidewalks	41,900 SF

FAQ

Category

Site Constraints

AES Site

Site Constraints

- Wetlands (Variance required)
 - ★ Variance may allow for additional on-site parking
- Existing Building
- Zoning (Variances required)
- ★ 80% open space requirement achieved

Cashman Site

Site Constraints

- Wetlands (Variance required)
- Existing Building
- ★ Zoning (Variances may be required)
- ★ 80% open space requirement achieved

FAQ

Category

Site Layout

AES Site

Building Layout

- 3-story building in close proximity to street

Parking

- ★ Limited due to site constraints; some parking in the neighborhood will be required (Possibility of leasing/purchasing private parking lot across the street)

Event Parking

- ★ 37 on-site parking spaces (incl. parallel parking available after drop-off and pick-up)

Future Expansion

- ★ Not possible on AES site

Existing Building on AES

- Would be demolished

Cashman Site

Building Layout

- 3-story building (2 story front facade)

Parking

- Improved and expands existing parking

Event Parking

- ★ Est. 250 on-site parking spaces (incl. parallel parking available after drop-off and pick-up)

Future Expansion

- AES could be swing space to replace existing CES

Existing Building on AES

- Available for other municipal use

FAQ

Category

During Construction

Distance Between Schools

AES Site

Timeline

- ★ 40 month construction duration:
 - Extended due to phased construction
 - Extended due to “urban-like” conditions
 - Extended due to demo of exist building

Disruptions

- ★ Building construction 10’ from occupied school
- ★ Minimal on-site contractor lay-down area
 - Limited on-site parking
 - Compromised drop-off/pick-up
- ★ Reduced green space/play area

Start Times

- Staggered, 30 minutes

Student Interaction

- Minimal opportunity for vertical integration

Cashman Site

Timeline

- ★ 24 month construction duration:
 - Early site package to accelerate construction

Disruptions

- ★ Building construction 130’ from occupied school
- ★ Room for on-site contractor lay-down area within contractor area
 - Minimal site circulation disruptions
- ★ Reduced green space/play area

Start Times

- Concurrent

Student Interaction

- Opportunities for vertical integration

★ Updated information after the 10/10/18 Community Forum

FAQ

Category

Neighborhood Impacts

AES Site

Traffic

- Minimal neighborhood increase
- Substantial increased cross-town traffic

Drop-Off/Pick-up

- Neutral

Building Profile

- Large mass
- 50' min. height with minimal setback from street

Construction Disruptions

- ★ Significant (cars and trucks parked on roads)
- Proximity to neighbors
- Increased construction traffic

Bus vs. Walk Population

- Currently ≤ 25 students walk to this school

Cashman Site

Traffic

- Increased neighborhood traffic
- Increased cross-town traffic

Drop-Off/Pick-up

- Improved

Building Profile

- No impact

Construction Disruptions

- ★ Minimal neighborhood disruption (cars and trucks parked on-site)
- Separate construction access

Bus vs. Walk Population

- Currently ≤ 25 students walk to this school

FAQ

Category

Recreation

AES Site

Fields

- Possibility to retain existing baseball field

Playgrounds

- Existing playgrounds will be demolished; build new playground on site

Proximity to Recreational Opportunities

- Existing educational trails remain

Cashman Site

Fields

- Two baseball fields will be eliminated; replicated at Woodsom Farm

Playgrounds

- One existing playground remains, one playground demolished; build new playground on site

Proximity to Recreational Opportunities

- ★ Existing educational trails remain

FAQ

Category

Costs

AES Site

Transportation

- ★ No change in operational costs

Operational

- ★ Neutral (same regardless of site)

Construction—Building

- Increase for de-watering
- Increase for existing building demolition
- Increase for extended timeline
- Increase for urban-like construction

Construction—Site

- Retaining walls

Staff

- ★ Neutral (same number of staff regardless of site)

Cashman Site

Transportation

- ★ Savings in operational costs
(Reduced number of buses)

Operational

- ★ Neutral (same regardless of site)

Construction—Building

- Standard construction methods

Construction—Site

- Increase for baseball field relocation
- Increase for extended roadway
- Potential retaining walls

Staff

- ★ Neutral (same number of staff regardless of site)

FAQ

Category

Costs

AES Site

Bottom line costs

- ★ \$59.4 - \$67.8 Million Project cost

Bonds

- ★ 20 year Bond
 - 4.5% interest
 - \$470 - \$535 annual household cost
 - Average \$57.7 Million total Bond Cost
- ★ 30 year Bond
 - 5.25% interest
 - \$410 - \$460 annual household cost
 - Average \$75.3 Million total Bond Cost

Cashman Site

Bottom line costs

- \$59.2 - \$64.2 Million Project cost

Bonds

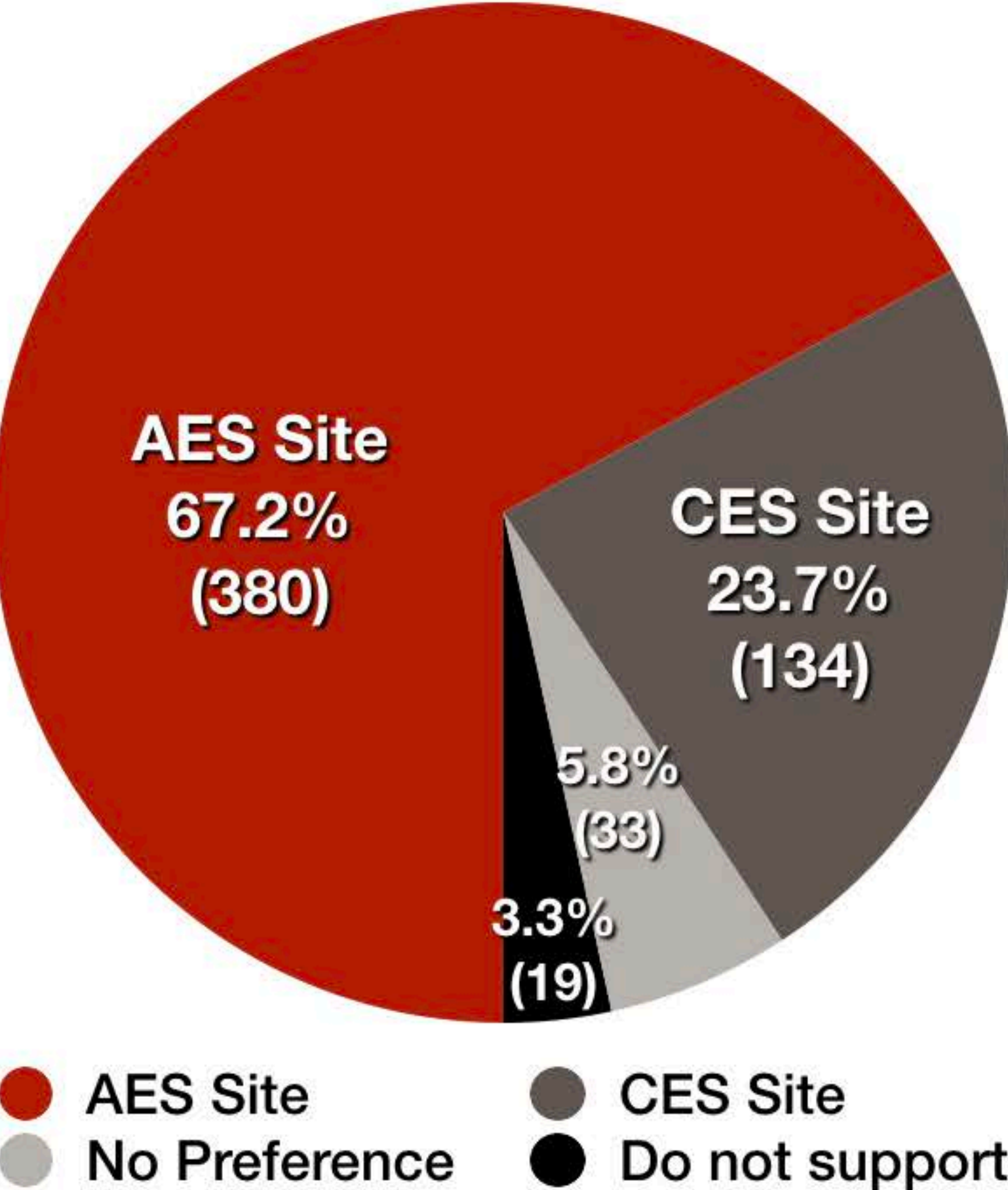
- ★ 20 year Bond
 - 4.5% interest
 - \$450 - \$490 annual household cost
 - Average \$57.7 Million total Bond Cost
- ★ 30 year Bond
 - 5.25% interest
 - \$390 - \$430 annual household cost
 - Average \$75.3 Million total Bond Cost

Fourth Community Survey | Results

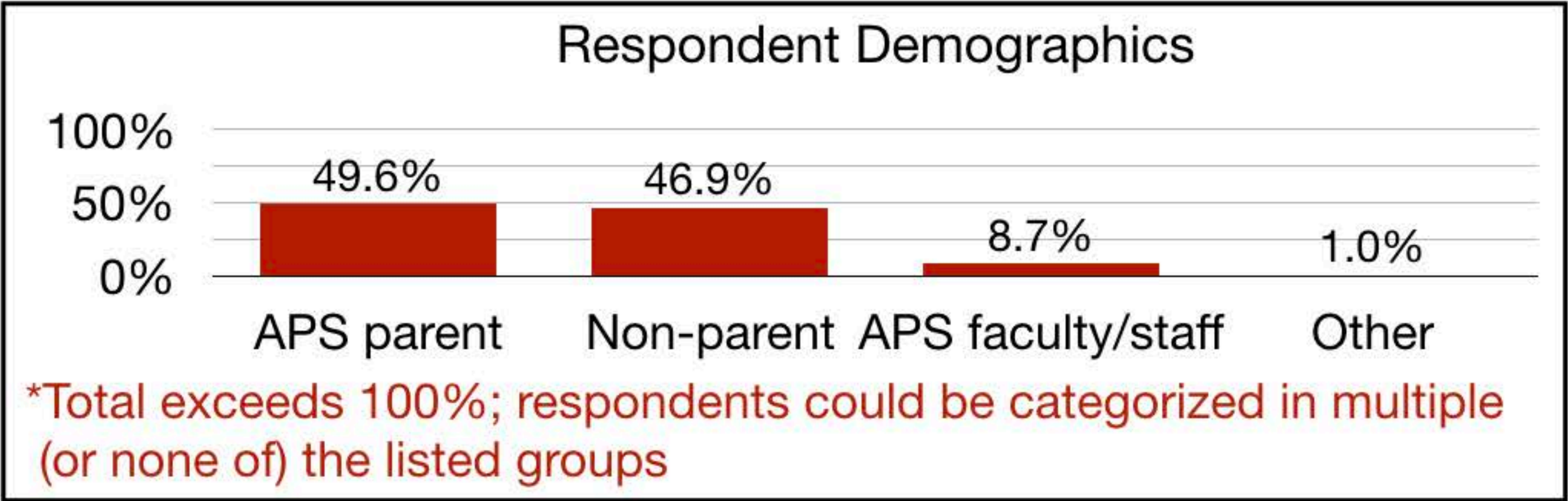
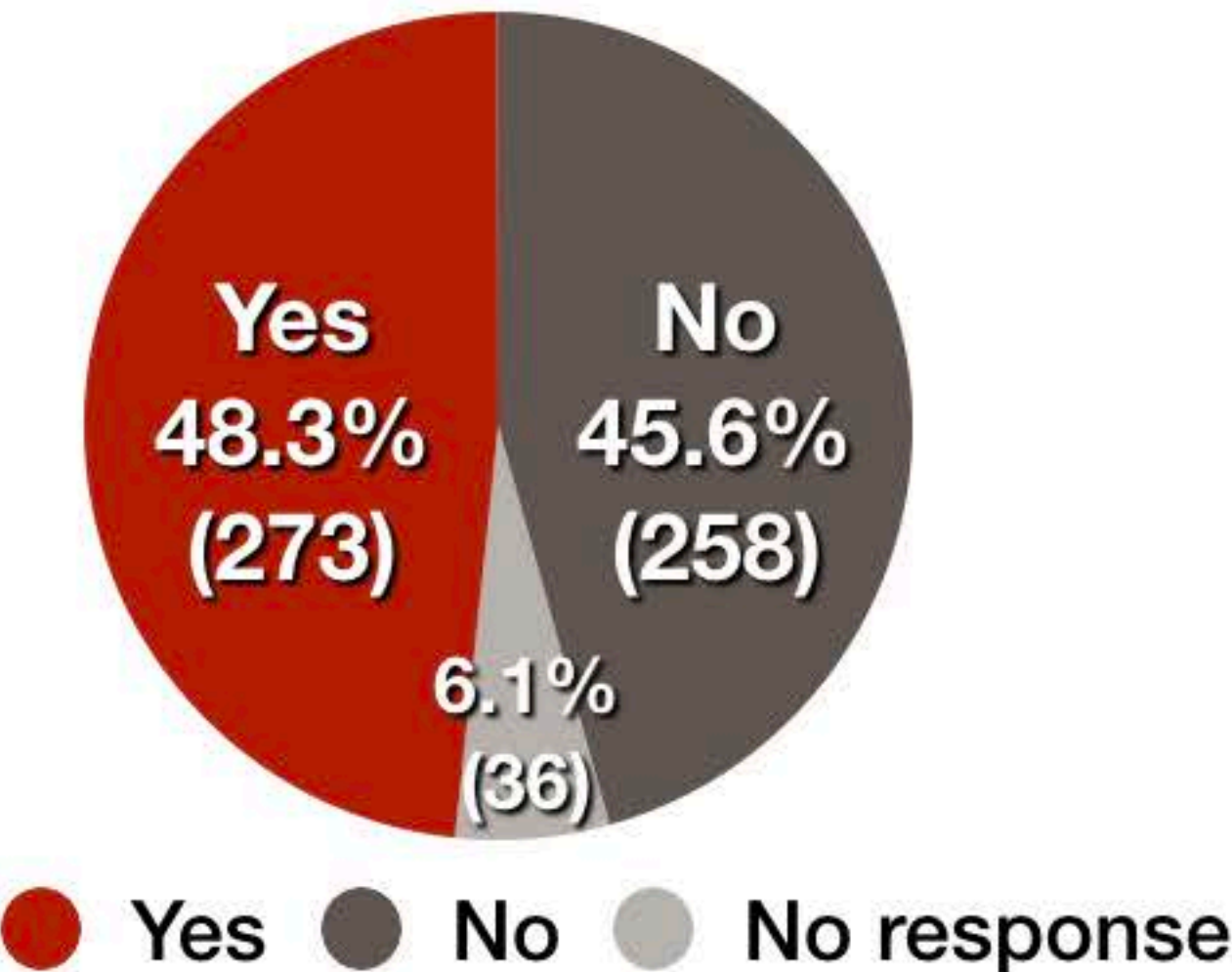
565 Responses

We sought opinions on the preference of site for the AES project

If you support the AES project, do you have a preference for the site?



If your preference isn't selected as the final site, will you still support building a school on the other site?



Site Evaluation and Selection | SBC Approval

Seeking your vote to select a site to continue forward with the Preferred Schematic Report

- AES Add/Reno**
- AES Phased New Construction**
- CES New Construction**



PDP Submission | SBC Approval

Seeking your vote to approve and authorize the OPM to submit the PDP to the MSBA for its consideration.



Massachusetts School Building Authority

Funding Affordable, Sustainable and Efficient Schools for Local Communities

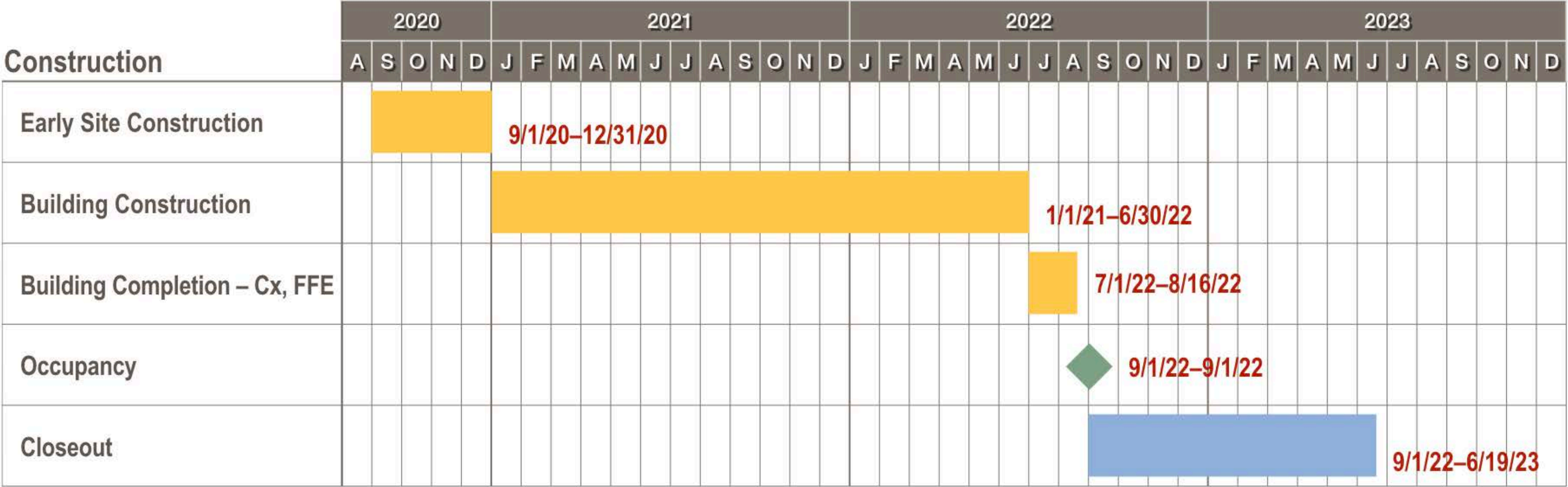
MSBA Process & Timeline

- MSBA Enrollment / Program Review October 31, 2018
- Preliminary Design Program (PDP) November 01, 2018
- Evaluation of Design Fall 2018
- Preferred Schematic Report (Study) January 3, 2019
- MSBA Board Meeting (PSR) February 13, 2019

MSBA Process & Timeline

	2018						2019							
	J	A	S	O	N	D	J	F	M	A	M	J	J	A
Preferred Schematic Report (PSR)														
MSBA Enrollment/Program Review			8/29/18–10/30/18											
MSBA Vote – accept new enrollment					10/31/18									
Preliminary Design Program (PDP) Submittal					11/01/18									
Evaluation of design options					11/1/18–12/31/18									
MSBA PSR (Study) Submittal							1/3/19							
MSBA Vote to Proceed								2/13/19						

Construction Timeline | CES Concept 3



Next Steps

- | | |
|------------------------------------|------------------|
| • PDP approval | October 25, 2018 |
| • Site evaluation & selection vote | October 25, 2018 |
| • PDP Submittal | November 1, 2018 |
| • PSR Submittal | January 3, 2019 |